Crop type map of the Gaza Strip 2023

Crop type map assessment
FAO and UNOSAT have conducted a series of geospatial assessments of agricultural land and infrastructure to assess damage due to the conflict in the Gaza Strip. Monitoring crops using remote sensing facilitates a greater understanding of crop distribution and spatial variability.

A crop type map was prepared using 539 training data points identified based on very high-resolution imagery; Pléiades (0.5m), Worldview-2 (0.5m) and SPOT (1.5m). An agricultural time series analysis was conducted using Sentinel-2 (10m) multispectral imagery from January to December 2023, incorporating spectral signatures and crop calendars to identify crop types.

This map illustrates the distribution of crops in the Gaza Strip before the most recent conflict escalation in October 2023. In future assessments it will be used to analyze the impact of the conflict on crop yield, cropland viability and food security.

Key messages
1. The total cultivated cropland area in the Gaza Strip is 6 269 ha (2 210 ha field crops and 4 059 ha vegetables).
2. The crop types with the largest area in the Gaza Strip were wheat and barley (2 210 ha) and squash, eggplant and cucumber (1 330 ha) respectively.
3. The governorate with the largest total area of cropland was Khan Younis (2 032 ha).

*To convert to the locally used unit of dunums, divide by 10 (1 ha is equal to 10 dunums).